V1.54 - 12-17-17

Added internal factory settings to optimize production of KPA500 product. No new operator features added to this release.

V1.52 - 9-24-17

Frequency count now requires at least 1/2 watt input power to be valid. This corrects rare issue with unexpected band change in SSB operation. All Faults may now be reset through serial port.

V1.49 - 9-17-16

Corrected issue with periodic switching from STBY to OPER when no band signals are connect, BCD or K3 RADIO mode is set, and PWR ON->OPER is set.

V1.47 - 11-15-15

Updated Radio PC serial port handler to properly support Kenwood format. This version now supports memory operation and issues the correct polling sequence for Kenwood radios.

V1.38 - 2-11-14

Enhanced operation with no BAND lines connected and RADIO=K3 or BCD. With POWER-ON set to OPER and RADIO=K3, on power-up the KPA will now go to operate mode when the K3 enables its band lines or if the band lines stay at all 1s for 4 seconds. If RADIO=BCD, it will go to OPER immediately after the power-on self tests have completed.

V1.37 - 1-24-14

Serial commands received and processed during startup could cause strange behavior. Processing of commands during startup are now disallowed. They will still be received and will be processed after the startup state completes. Serial ports are now disabled at the beginning of shutdown so they cannot affect the process.

V1.36 - 1-9-14

1) Added ^FS; serial command which returns the current fan speed. The format of the command is:

^FS; - gets the current fan speed. This is a get-only command.

The response is:

^FSn; where n indicates the current fan speed from 0 (off) - 6 (full speed)

2) Corrected a situation where some parameter changes from serial port commands were not being properly saved.

3) Tweaked the Hi Reflected Power attenuation indication.

4) Corrected a HI REFL Fault bug.

V1.33 - 8-5-13

1) Fixed a problem with KPA500 power-on when Power-ON OPER was set. If the K3 was on a different band on KPA power-up than when the KPA was last powered down, then the KPA would not send the OPERATE message to the K3. This worked properly if the K3 was on the same band as previous. The KPA should now properly send the OPERATE message, and the K3 should change to th alternate (asterisk) setting if properly set on the K3.

V1.32 - 6-30-13

1) The BAND input signals will cause an OPER->STBY transition when the K3 outputs all 1s on these lines. Now if these inputs have never changed from all 1s from startup we will not perform the transition. This corrects operation with the KX3 or other transmitters that do not output these signals.

V1.29 - 2-13-13

1) Corrected problem with Auxbus not completing transmission on shutdown thus keeping power-off hanging, waiting for the Auxbus to complete. This only occurred if Auxbus was active when user pressed power button to shut down.

2) Found and corrected a situation where faulty ADC reads would occur. Such reads are now properly ignored.

3) Improvement with SWR fault checking code.

4) Added ^PO; command to enable / disable Power On Operate from serial control. The format of the command is:

^PO; - gets the state of the parameter.

^POn; - sets the state of the parameter. n = 0 to disable, 1 to enable.

The response is:

^POn; where n indicates the parameter state, 0 = disabled, 1 = enabled.

5) An inbound serial character while eeprom was being written could cause serial IO to become disabled. This is now corrected with an improved EEPROM write function that causes interrupts to be disabled for an absolute minimum time.

6) Improved power-on algorithm for K3 state detection. We still have anomalies with the K3 off in that it gives a band indication of 60 meters when off. We now properly detect power on conditions and handle them properly.

V1.23 - 12-26-12

1) Added hold of peak current and minimum voltage displays when PK Hold was set to enabled (set to 1).

V1.21 - 12-23-12

1) K3 powered on after KPA now works properly. KPA properly detects K3 power on and sends AuxBus commands as needed.

Note that the previous version (V1.20) was misidentified in the release notes that accompanied it as V1.19. This was also corrected here.

V1.20 - 12-22-12

1) Corrected issue with power on not sending an OPER message when Power-On=>OPER is set.

2) Data overrun condition is now detected and cleared for serial ports when interrupts are enabled. Data sent between the power-on command and serial system being enabled were causing the serial ports to hang.

3) If the KPA was powered off from back panel the LCD display selection may become corrupted. It is now checked and if out of the proper range, is reset for the band display.

V1.18 - 11-25-12

1) Corrected issue with serial transmit interrupts not returning quickly.

V1.17 - 10-31-12

1) Added additional error checking and resolution for a condition where drive power was indicated but no output power is detected. We now rewrite the band relays up to five times before declaring a fault.

V1.16 - 10-15-12

1) Added support for KAT-500. The KPA will now delay declaring a reflected power fault until the KAT500 has the chance to start tuning.

V1.11 - 8-11-11

1) Auxbus messages sent to the K3 indicating a mode change to STBY after a K3 initiated band change are now delayed to allow the K3 to complete its internal housekeeping.

2) Auxbus menu item has been removed; selecting the K3 for Radio automatically enables the Auxbus whenever the K3 is powered on.

3) When K3 is selected for RADIO, at power-on the KPA will wait for K3 band inputs to become active, then will delay a few seconds more before sending the KPA ON message to the K3. This assures the K3 receives both the ON and the OPERATE messages and can react to them. The K3 power control is not reduced to the KPA drive level until this message is received. Be sure to wait until this time to avoid possible excess power faults.

4) Fixed 6m SWR calculation problem with low reflected power. SWR no longer jumps on key up.

5) The Fault speaker is now disabled at shutdown, eliminating a potential problem where the speaker could remain sounding if the KPA is shut off during a fault.

6) ALC threshold control now has much better resolution, using its entire range. This enhancement will require rework of the ALC control settings.

7) Added INHIB IN menu item and control to allow INHIBIT# input to be disabled. INHIB IN is set to disabled by default. If you use the KPAK3AUX cable and use the K3 DIGOUT1 signal for controlling something other than the KPA500, you will want to set INHIB IN to DISABLE. Of course if you have the INHIBIT# input connected to something else, you will want INHIB IN set to ENABLE.

8) The maximum value allowed for HV is now 90 volts, up from 85V in previous versions. It is checked during both STBY and OPER modes.

9) The parameter being displayed when the KPA is powered off is saved and redisplayed on next power-on.

10) When viewing parameters other than band, a band change will cause the new band to be displayed momentarily.

11) ^OS command now properly reports state to K3 as documented in the KPA500 Programmers Reference.

V1.02 - 5-15-11

1) Added DEMO mode to menu. The parameter can either be ON or OFF. to turn demo mode on or off. This is "sticky" so that it survives a power cycle.

2) Added POWER-ON menu item. The selections are STBY (default) and OPER. When OPER is selected the amplifier will power up in OPER mode. This is "sticky" so that it survives a power cycle.

V1.01 - 05-01-11

Ship release.

No issues